



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(351064)
Machine Id
122398-1216
Component
Diesel Engine
Fluid
PETRO CANADA SUPREME 5W30 (25 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0288336	LH0281254	LH0276908
Sample Date		Client Info		27 May 2024	07 Feb 2024	31 Oct 2023
Machine Age	hrs	Client Info		0	5387	5000
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	7	6	4
Chromium	ppm	ASTM D5185(m)	>5	<1	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>15	2	2	1
Lead	ppm	ASTM D5185(m)	>30	0	<1	2
Copper	ppm	ASTM D5185(m)	>125	2	2	2
Tin	ppm	ASTM D5185(m)	>5	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

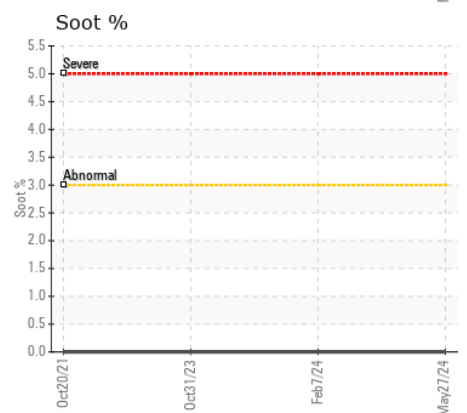
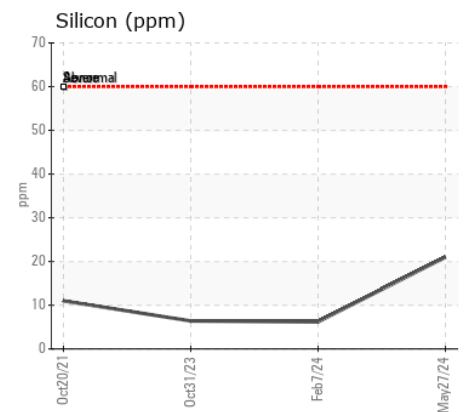
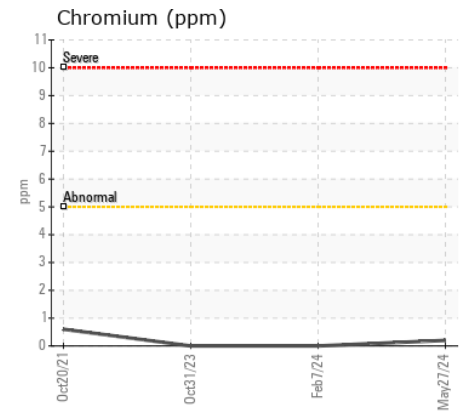
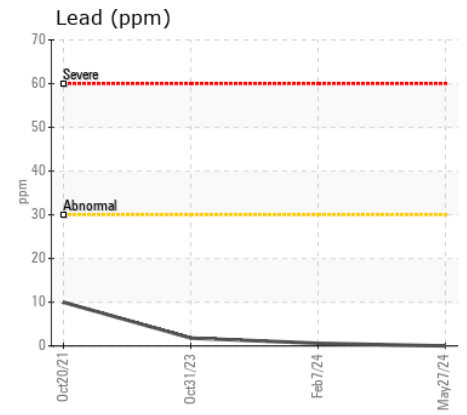
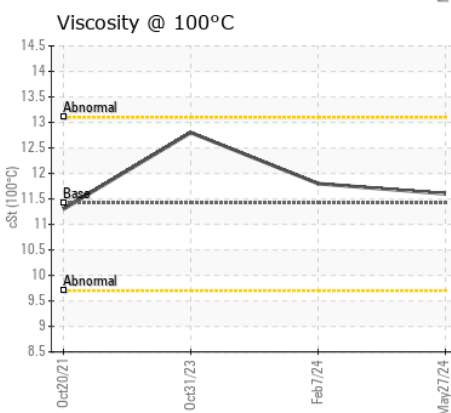
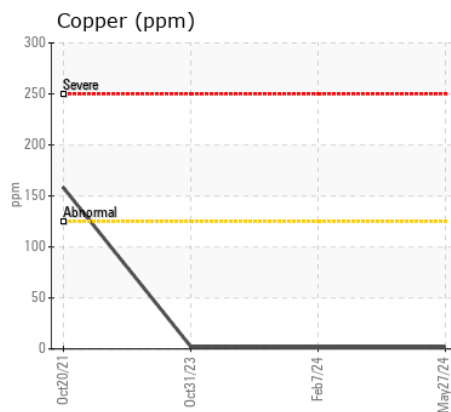
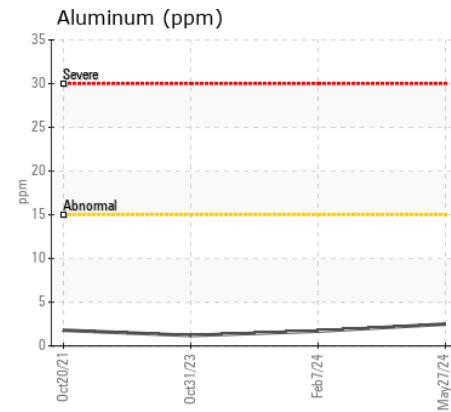
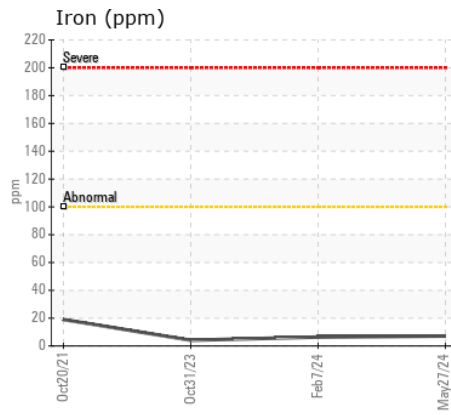
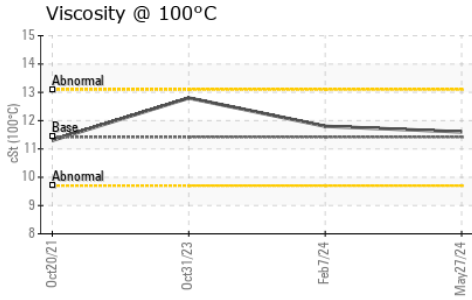
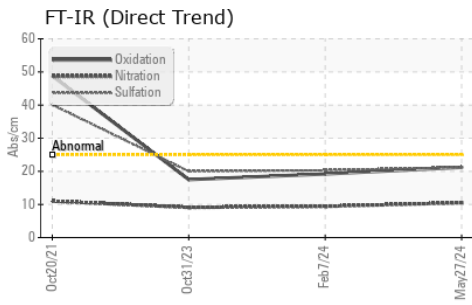
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	21	6	6
Potassium	ppm	ASTM D5185(m)	>20	4	<1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.5	9.4	9.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.2	20.3	20.0
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	4	2
Boron	ppm	ASTM D5185(m)	186	26	29	2
Barium	ppm	ASTM D5185(m)	<1	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	79	58	55	59
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	578	1141	1079	994
Calcium	ppm	ASTM D5185(m)	1002	862	848	1049
Phosphorus	ppm	ASTM D5185(m)	745	996	1035	1030
Zinc	ppm	ASTM D5185(m)	837	1255	1170	1206
Sulfur	ppm	ASTM D5185(m)	2502	2736	3013	2710
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.2	19.2	17.5
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	11.6	11.8	12.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0288336
Lab Number : 02644544
Unique Number : 5802083
Test Package : MOB 1
Received : 28 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 Jun 2024 - Wes Davis

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.